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CUMBERLAND COUNTY COUNCIL.

EDUCATION COMMITTEE.

REPORT

OF THE

SCHOOL MEDICAL OFFICER

F. H. MORISON, M.D., D.P.H., &c.,

ON THE

Medical Inspection of
School Children.

FOR THE YEAR ENDED

DECEMBER 31st, 1929.

LIVERPOOL :

MEER, THOMAS & CO. LTD., PRINTING CONTRACTORS

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CUMBERLAND COUNTY COUNCIL.

To the Chairman and Members of the Education Committee.

MR. CHAIRMAN, LADIES AND GENTLEMEN,

I have pleasure in submitting this the Twenty-second Annual Report on the Medical Inspection and Treatment of School Children, for the year 1929.

Owing to extreme pressure of work, due to the Local Government Act, 1929, I saw no prospect of being able to issue a report in reasonable time. I, therefore, asked Dr. Kenneth Fraser to write it, and I now present it to you, confident that it will interest you, and bring to your notice many matters that are worthy of your careful consideration, such as the remarks under the headings "Milk to Malnourished Children" and "Dental Decay and Diet."

The treatment of school children has progressed along satisfactory lines, and during the year a second Dental Officer has been appointed, and commenced work in West Cumberland in November. Already the work done by him has been much appreciated.

Thanks to the co-operation of the Director of Education, the prospect of obtaining an open-air school for delicate children has now come within measurable distance of accomplishment.

I have the honour to be,

Ladies and Gentlemen,

Yours obediently,

F. H. MORISON,

School Medical Officer.

To the Chairman and Members of the Education Committee.

MR. CHAIRMAN, LADIES AND GENTLEMEN,

GENERAL.

The Report which follows deals with the Medical Inspection and Treatment of Elementary and Secondary School Children during the year ended 31st December, 1929. The School Medical Service of this County is, except in one or two particulars, adequate, and is carried on smoothly and without incident or substantial variation from year to year. No doubt that is as it should be, but it makes the annual task of writing a report of any interest exceedingly difficult.

In 1924 the School Medical Officer, under pressure of duties arising out of the smallpox epidemic, asked me to write the report for that year. This year again the same position has arisen owing to pressure of work arising out of the Local Government Act, 1929, and other matters.

I propose, therefore, to take these two purely arbitrary dates—1924 and 1930—and to review what progress, if any, has been made in this period.

In 1924 I said: “ The scheme of Medical Inspection has now settled down into a definite routine—a routine which is, with the exception of the few points outlined below, satisfactory. . . . The general position is that the service, as it now stands, provides for the close and regular supervision of the health of some 30,000 school children, and for the combating of such matter as may adversely affect their physical well-being, exclusive of such matters as industrial distress, which cannot come within the purview of a medical department.”

The chief defects in the scheme in 1924 were:—

- (1) The inadequacy of the dental service.
- (2) The lack of open-air school or convalescent home facilities.
- (3) The lack of facilities for dealing with out-of-the-way cases.
- (4) The unsolved problem of the employment of the cripple.
- (5) The lack of school clinic facilities in certain areas.

With regard to 1.

A great step forward was made in the Autumn of 1929, when an Assistant Dental Officer and Nurse were appointed. This means that Brampton, Longtown, Penrith, Wigton and Maryport in one area, and Cleator Moor, Arlecdon and Frizington, Egremont, Parton, Harrington, and a large part of Whitehaven Rural District in the second area, will be under regular dental inspection and treatment. In addition, as previously, children with septic mouths from all over the County will be treated at one or other centre as arrangements allow.

While two school dentists cannot hope to deal with the school population of Cumberland, the new position is a great step forward, and it may be possible at comparatively little cost to amplify the service by the inclusion of part-time dentists at certain points.

I should like here to draw attention to the suggestion made by the School Dental Officer in his report (Appendix B), that the charge for dental treatment should be reduced from 2/6 per case to 1/- per case. The School Dental Officer has made this suggestion for several years now. It will be noted that he suggests that the reduction in the fee would result in a larger total amount in receipts. The amount received from parents at the rate of 2/6 per case for the last financial year was £20 15s. 0d., which means that the fee was paid in respect of 166 children treated. As the total number of children treated during the year was 2,154, and as this number, owing to the appointment of an Assistant Dental Officer, will probably be doubled during 1930, it is clear that if 1/- is received per case treated, there would certainly be a very notable increase in the receipts, which potentially might be in the region of £200.

Mr. Gillieson, who is well qualified from his experience of the whole County to speak on this point, is of opinion that few parents would grudge the 1/- fee, or would be unable to pay it.

With regard to 2.

The Education Committee during 1929 purchased a site for an open-air school at Silloth, and plans for this school have been prepared. The open-air school is one of the features of development laid before the Education Committee by the Director and approved by them.

The general idea is that accommodation for thirty children will be provided in the open-air school in the first instance—presumably fifteen boys and fifteen girls, and that in due course, as economic circumstances permit, the accommodation will be increased. It is not necessary here to emphasise the extreme value which such an institution would have for the school medical service of this County. That has been brought forward on many occasions by the School Medical Officer, and that the Education Committee is, and has always been, fully alive to this value is evidenced by the fact that on four or five occasions resolutions recommending the establishment of such an institution in the County have been approved by the Education Committee. While debilitated children from all parts of the County would benefit, it is obvious that the chief benefit of an open-air school would be felt by those children living in the industrial areas of West Cumberland, where economic conditions are the worst, and where, in some districts at any rate, the housing condition under which these children live are deplorable.

With regard to 3.

After prolonged correspondence the Board of Education have approved, with certain qualifications, proposals laid before them for dealing with out-of-the-way cases. It may be well to explain what is implied by this term. There are discovered from time to time in the routine work of medical inspection a certain number of cases for which our schemes do not normally provide. Such, for example, are obscure nervous cases, congenital heart cases, a limited number of difficult surgical conditions, and so on. Such defects may be very much more important than tonsils, adenoids, defective vision, or rickets. They are certainly much more difficult to cater for. What we have been pressing the Board to approve is the right to send such children to specialists and special hospitals for diagnosis or treatment, or both, as the case may be. Fortunately, the transfer of the Poor Law functions to the County Council will solve this problem, because such cases are "necessitous" within the meaning of the Act.

With regard to 4.

A beginning has been made with the solution of the problem of the cripple in obtaining employment. Four badly crippled children, all boys, have been sent for training to the Shropshire Orthopaedic Hospital Training Centre.

Three were sent by the Education Committee, and one by the Whitehaven Board of Guardians. One of these boys is being trained as a clerk, two are being trained in boot making and repairing. The fourth boy failed to settle down and was sent home. That may seem a small beginning, but it has widened our experience, and a further list of seriously crippled children has been submitted to the Public Assistance Officer for consideration for training. The powers of the Public Assistance Committee in this respect are fortunately not circumscribed in the same way as are the powers of Education Authorities. One crippled boy, for example, is anxious to be trained in gardening. He has set his heart on this. There are, however, so far as we could trace, no facilities for training a boy of this kind in gardening under the powers of the Education Committee. He will require to be trained in a branch of gardening—e.g., greenhouse work—suitable to his crippling condition, and that means, in practice, apprenticing him to a private employer. Such an arrangement comes within the powers of the Public Assistance Committee.

Reference has been made later in this report to a matter which has some relation to this point. A company of crippled Girl Guides had been established in Cumberland, and, through the kindness of Mrs. Selby Chance, held a camp at Broadfield in 1929. Steps are being taken to establish a company of crippled Boy Scouts on the same basis. These companies are termed Post-Guide and Post-Scout Companies, because much of the training is done by post. They are intended to extend the benefits of Guiding and Scouting to seriously crippled boys and girls in their own homes. In addition, these children are taught handicrafts, and when their work reaches the required standard the things they make are sold for their benefit.

Those to whom our thanks are due for their interest and help in this work are referred to later in the report. It should be added that Miss Nelson, our after-care worker, has been closely associated with both matters, and went to camp with the Guides last year.

With regard to 5.

School clinic facilities are required in certain centres not so provided for at present. By far the most urgent need is at Frizington, where for years the industrial distress has been extreme, and from which area the children and

their parents at present attend the school clinic at Cleator Moor. The result is a hardship to the Frizington people, and causes extreme congestion at Cleator Moor, with a resulting loss of efficient work, as the Medical Officer (Dr. Towers) has repeatedly reported.

Other areas where school clinics would be useful are Brampton and Aspatria.

OTHER MATTERS.

Treatment of Ear, Nose and Throat cases.

Marked progress has been made in the treatment of diseases of the nose and ear. Very many more cases are now seen in consultation by the ear, nose and throat specialist (Dr. Dunlop) than was the case before his appointment. The actual number of consultations during 1929 was 187. These frequent consultations ensure that the treatment of these cases is closely supervised. In addition, during 1929 the scheme of after-care of ear, nose and throat cases, referred to in the report for 1928, has been put into full operation throughout the County. Some ninety-two cases have received such regular supervision and after-care throughout the year. It is not generally realised that after-care is absolutely essential to the successful treatment of this group of cases just as it is in orthopaedic surgery, and without such after-care the value of operative treatment is frequently lost. The results of the after-care scheme throughout the year have been exceedingly satisfactory. Administratively it has been a most difficult scheme to put into operation in a scattered area like Cumberland, involving as it does daily treatment often somewhat complicated, for months on end. Our Medical Officers, Health Visitors and the District Nurses have all combined to the success of the scheme.

Issue of Milk to Malnourished Children.

Towards the end of 1929 arrangements were completed for the issuing early in 1930 of milk to children suffering from malnutrition in certain areas in West Cumberland. The farms from which the milk was to be issued were chosen with the approval of the County Veterinary Officer, who arranged for the bacteriological testing of the supply for cleanliness and freedom from tubercle. The arrangements provided that each child classified by the Medical Officers as

suffering from malnutrition was to be supplied with half-pint of milk each morning and afternoon at school, glasses being provided by the Education Authority. Some 235 children were concerned. It may be said here that milk is the form of school "meal" if it can be so classified, which is the cheapest and simplest to provide, and is the most productive of results. The habit of providing milk to school children is growing generally in this country. The more the habit is extended and developed the better for the children. The work of Corry Mann, published by the Medical Research Council in 1926, proved conclusively the value of milk to the growing child. His investigations were carried out among some hundreds of boys and over a considerable period, and demonstrated that "the addition of one pint of milk daily to a diet, which by itself satisfies the *appetite* of growing boys fed upon it, could convert an average annual gain of weight of 3.85 lbs. per boy into one of 6.98 lbs., and an average annual increase of height from 1.84 inches to 2.63 inches. This unmistakable betterment in nutrition was proved by trial to be due to the specific qualities of *milk as a food*."

Experiments by Orr, of the Rowett Institute, and in Ireland, have since confirmed these results. It is generally agreed by all these observers that children receiving milk at school can be picked out from among the other children by independent persons on account of their greater alertness and vitality.

It is also known that milk has a high value in increasing resistance to certain epidemic diseases, especially influenza and common colds. In this country we place a ridiculously low value on milk as a food. We have, in fact, the lowest consumption per head of any civilised country—the average *daily* consumption per head being estimated at a quarter of a pint, which means, of course, that in many industrial areas the daily consumption is much less.

One would hope that the issue of milk to school children will be very greatly extended in the near future. By this I do not necessarily imply a *free* issue. For years we have been accustomed to have a definite "milk group" in our secondary schools—many of whom are placed in this group at the medical inspections. For such issues the parents as a rule willingly pay.

It is well worth pointing that *separated* milk is just as valuable as whole milk *for this purpose*. Orr clearly proved this in his experiments, and it is, of course, just what common sense would lead us to expect. Separated milk is milk from which a certain amount of milk fat has been abstracted in which is included most of the Vitamin A. But fat is easily added to our diet; most of us, in fact, eat more fat than we can usefully dispose of. Nor is the loss of Vitamin A likely to be a matter of grave concern, *except as an anti-infective agent*.

The relative importance of vitamins and minerals in diet is gradually becoming clearer, and it is coming at long last to be realised that what matters in milk as in all diet equally with the vitamins (and especially Vitamins A and D), is the mineral element—calcium, iodine, and so on—and these minerals are retained in separated milk.

Far too much importance is placed under the existing laws on the percentage of fat in milk, and far too little on the danger of the organisms of disease in milk. It is a far greater *moral* crime to sell milk containing tubercle or other organisms of disease than to sell milk containing a lower percentage of fat than that required by statute.

Bearing this in mind much may be done in the near future by the issue to the schools of separated milk, as and when obtainable, to reduce the cost of the milk issue without loss of benefit.

Dental Decay and Diet.

The School Dental Officer in his report (Appendix B) gives it as his opinion that the teeth of the children entering the elementary schools of the County are "steadily on the down grade." The condition of the teeth of these children in 1921—when school dentistry started in this area—was "vastly superior" to what it is to-day. Furthermore, he stated, that this same state of affairs has been noted by School Dental Officers of experience in many other areas.

The School Dental Officer goes on to ascribe this state of affairs, which manifestly is of great importance, to faulty diet, which, with certain qualifications, is probably a correct opinion. But he goes on to imply that owing to economic circumstances the people in industrial Cumberland cannot afford an adequate diet. To this view I cannot subscribe for the reasons set out below. He goes on to say that

people under economic stress buy for quantity and not for quality. That is perfectly true, but it need not be so. He might have added that they buy pastry and cakes and tinned foods of all kinds, and with these and potatoes and tea they largely make up their diet. This is partly because they like these things and partly because they involve little or no preparation.

It would be folly to pretend that the poor have the same facilities as those of better fortunes for proper meals. Their income is limited, and they have to buy food of such quality and condition as they can afford. For this reason the need for the close supervision of the sale of foodstuffs, and especially perishable foodstuffs, in such areas, is supremely important.

Again, the housing conditions of the poor are such that facilities for the storage of food and the preparation of meals are totally inadequate. Then the conditions necessarily involve a multiplication of meals, with the men of the house going on shift and the children to school at different hours, and returning for their meals at different hours.

Housekeeping under these conditions is a very difficult matter.

But, admitting all that, the diet of the poor might be much better *scientifically* than it is. I say "the poor" because I am dealing with the poor, but the same applies to the whole community.

It is, I believe, a fact that a scientifically balanced and adequate diet can be provided for an adult at a cost of about 6d. per day. But in feeding, monotony has to be avoided, and, therefore, it may be well to set out some of the things which will render a diet scientifically adequate while leaving scope for personal choice outside these things.

It has for some considerable time been realised that certain kinds of food have a greater food value than others, and that price and the fictitious values placed on different foods according to their price have nothing to do with the matter. The best fish, from the food value point of view, are those so widely apart on the selling scale as herrings, mackerel, halibut and salmon. The best beef steak is not nearly so valuable as food as what is classed as "offal," i.e., liver, tripe, and so on.

Now there are certain foods of such high scientific value that if they are included in any diet in reasonable amounts the rest of the diet can be chosen haphazard, and still the total dietary will be adequate. To such foods the name of "protective foods" has been given. Wherein their value lies is not a matter of agreement. Some hold that it lies chiefly in the vitamin content. Some hold that it lies chiefly in the mineral content—calcium, iron, iodine, phosphorus, and so on. These opinions, I think, will ultimately converge to the view that both these contents are important, and that they are mutually interdependant. There is no doubt that the value of the mineral content of diet has until recently been overlooked.

A study of what happens in the animal kingdom and of the natural instincts of animals confirms this beyond argument.

Most valuable and remarkably interesting work has been done at the Rowett Institution in this connection.

It is too long and complicated a subject to elaborate here, but the periodic pilgrimages of animals to "salt licks" or to the sea-board, the fact that herbivorous animals, such as cattle and sheep, will habitually eat pasture in patches and that the pastures eaten or eaten first are those shown by repeated analysis to be richest in mineral contents, the fact that animals feeding on a mineral-deficient diet will do the most extraordinary things to supply the mineral craving which develops, such, for example, as that non-carnivores, like domestic cattle, will in these circumstances eat the *skeletons* of other dead cattle, all prove the strong natural instinct in the animal kingdom for minerals in their diet.

But whether the value of the "protective" foods lies chiefly in minerals or vitamins—their value in the dietary is definitely established.

What are the easily obtained "protective" foods? A rough list would be something like this:—Milk, wholemeal, cheese, eggs, herrings, mackerel, green vegetables (lettuce, water cress, spinach, cabbage), oranges, and tomatoes. Such foods should be taken *so far as possible in their raw state*. Milk should not be boiled or even pasteurised, green vegetables should not be cooked unnecessarily. Spinach and even cabbage can very well be eaten raw in salads. Tomatoes should not be cooked. What I mean is that such foods *if taken as protective foods* should be interfered with as little as possible.

The application of all this to dentistry is extremely interesting and rather complicated. Unsuitable diet appears to be able to cause dental decay in two ways—first, by the fact that a diet consisting largely of carbohydrates and sugar in the shape of porridge, milk puddings, bread and jam, cakes and sweets, etc., adheres to the teeth, ferments on them, produces lactic acid, and so destroys the enamel and opens the way for the destructive work of the organisms of dental caries.

On the other hand, unsuitable diet produces badly calcified teeth, and so predisposes them to liability to decay.

The things which matter in the calcifying of the teeth are chiefly calcium and phosphorus, but it has been shown that Vitamin D can produce well calcified teeth, with a limited amount of calcium and phosphorus, by enabling the body use the available supply of these minerals to the best purpose.

Exposure of the body to sunlight increases the Vitamin D factor enormously, and it has been observed that native races living on an unsuitable diet, mostly of a carbohydrate nature, retain excellent teeth so long as they remain more or less naked. When, however, such peoples assume European dress their teeth tend rapidly to decay. It has further been shown that when Vitamin D is insufficient in amount, increase of the calcium and phosphorus in the diet will largely atone for this, so far as the calcifying of the teeth is concerned, but where Vitamin D falls below a certain figure no amount of additional calcium and phosphorus in the diet will prevent badly calcified teeth. It further is apparent that with the foundations of well calcified teeth laid during intra-uterine life, and if the diet of the expectant mother is unsuitable, the dentition of the child inevitably suffers. On the other hand, it has been shown that a child can be born with badly calcified teeth, and yet the defect can largely be remedied after birth, and, vice versa, that a child born with well calcified teeth can lose this advantage by unsuitable diet after birth. To further complicate matters it would appear that certain kinds of food are *definitely antagonistic* to proper calcification of the teeth. These foods are the cereals, and oatmeal appears to be the chief offender in this respect.

These intensely interesting observations are set out in a Paper by Professor Mellanby in the "British Medical Journal," of April 12th, 1930, and in a chapter on "Dental Caries" in a recently published book of great interest by Dr. J. F. C. Haslem on "Recent advances in Preventive Medicine."

Immunisation against Diphtheria.

Another new feature of the school medical service since 1924 has been the introduction of immunisation against diphtheria in areas where epidemics of this disease occur. A considerable number of schools have been concerned. During 1929 there was an epidemic of diphtheria at Dalston, and 146 persons were immunised with toxoid-anti-toxin. The great majority, of course, were school children, the remainder being teaching staff and children under school age brought by their parents.

In the case of Dalston the usual preliminary step to immunisation, known as the Schick test, was eliminated. This test is intended to pick out persons naturally immune, but has certain disadvantages. It delays the first dose of anti-toxin for three days, and in a serious epidemic of high virulence, such as occurred some years ago in the Brompton Rural District, that is very undesirable. It is an extremely delicate test, taking up a great deal of time in dealing with large numbers, and has certain other disadvantages which need not be explained here. The interpretation of the test is in a proportion of cases liable to variation in different hands, and we, therefore, have definitely adopted the policy of immunising all children and staff concerned, which policy has the advantage of being somewhat cheaper, quicker, and eliminates all possibility of error, and has no disadvantages, because to immunise one or two persons naturally immune, if unnecessary, at least does no harm to anybody.

I.—STAFF.

During the year Mr. Donald Gollan, L.D.S., was appointed Assistant Dental Officer, and took up his duties in West Cumberland during November.

Miss Marjory Smith was appointed an additional Dental Nurse, and commenced duties on the 1st September. Other wise the staff has remained unchanged.

II.—CO-ORDINATION.

As before, the County has been divided into six Medical Areas, with a Medical Officer in charge of each area. Each Medical Officer undertakes the work of the School Medical Service, Tuberculosis, Maternity and Child Welfare, and a certain amount of General Public Health.

This ensures complete co-ordination between the different services, and, so far as children of school age and under are concerned, the transfer of the Poor Law functions to the County Council, as from the 1st April, 1930, will complete the co-ordination.

As from that date the County Council, in its capacity as the authority for infant life protection, will be responsible for children of this class up to the age of seven years, and through the Public Assistance Committee will be responsible for the supervision of boarded-out children.

It is certain that provision will be made for the treatment of any such children suffering from defects of one kind or another under the Maternity and Child Welfare Scheme, or the School Medical Service.

III.—SCHOOL HYGIENE.

As in previous years, the attention of the Director of Education has been drawn to any serious defects noted during the course of the medical inspection of the elementary schools.

There are, of course, many respects in which individual schools are unsatisfactory, and from time to time improvements take place.

One of the Assistant Medical Officers has suggested that the abnormally high percentage of defective eyesight in his area may be due to unusually defective lighting, and he has been asked to undertake an enquiry into this question.

IV.—MEDICAL INSPECTION.

The scheme of medical inspection remains the same as previously. The only alterations which have taken place have been in the treatment section.

Age Groups of Children Inspected.

The same age groups continue to be inspected, that is to say, the code groups:—(a) Entrants; (b) Intermediates (8 years old), and (c) Leavers (12 years of age and over).

Secondly, the “Specials,” that is, children of any age not examined under the code groups.

This group of “Specials” is, of course, of the highest importance, and it is in this group that a high proportion of defects are discovered.

Head Teachers assist the Medical Officers very greatly by bringing to their notice children whom they suspect of suffering from certain defects, such as debility, defective eyesight, defective hearing, and so on.

The third group is re-examinations. That is to say, children who are examined twice in the course of one year in connection with certain defects, as opportunity occurs.

The total number of children inspected was 16,486. Under the code groups 7,460, and under “Special” inspections 9,026.

In addition, 5,368 re-inspections were made.

V.—FINDINGS OF MEDICAL INSPECTION.

The accompanying Tables set out in detail the numbers of defects found, whether in the code or in the “Special” groups under the appropriate headings.

It is interesting to note that the number of children in the code groups found at the medical inspection to require treatment, apart from uncleanness and dental defects, was 1,172, or 16 per cent. of those inspected, which is exactly the same percentage as that for the previous year.

In the individual code groups the figures requiring treatment were:—Entrants 18 per cent.; Intermediates 17 per cent., and Leavers 12 per cent., of the numbers examined.

The figures for the Entrants and Intermediates are in each case 1 per cent. lower than last year; the figure for the Leavers remains the same.

These figures continue to show, as has been pointed out in the report of the School Medical Service for some years past, that the percentage of defects among the older children is habitually nearly 50 per cent. lower than that among Entrants and Intermediates.

There is, I think, little doubt that the meaning of this is that the great bulk of defects are discovered during the early years of the school life of each child, and are corrected long before the child reaches the Leaver group.

Review of the facts disclosed by Medical Inspection.

The following is a summary of the chief groups of defects requiring treatment, as noted at the school medical inspections and school clinics during the year:—

Malnutrition	57
Uncleanliness	157
External Eye Diseases	350
Defective Vision and Squint	689
Tonsils and Adenoids	570
Ear Disease and Hearing	309
Heart Disease and Anæmia	188
Lung Diseases—Non-Tubercular	249

TUBERCULOSIS.

Pulmonary—Definite	41
„ —Suspected	54
Non-Pulmonary	43
Nervous Diseases	123
Skin Diseases	929
Other Diseases and Defects (chiefly minor ailments)	1579
	<hr/>
	5338
	<hr/>

Crippling and dental defects are included in their own sections of this report. These various figures call for some comment.

MALNUTRITION.

The malnutrition figure is surprisingly small in view of the prolonged economic distress in this County, and especially in West Cumberland. It is to be remembered that only the worst cases are included under this heading, and that the number of children below par, distributed among the other headings, is very much greater. The fact of the matter, however, is that if advantage is taken by the parents of the facilities offered by the School Medical Service no child need ever, or should ever, get into the condition which we classify as malnutrition at all. The milk issue, starting in 1930, should materially reduce the malnutrition figures for 1930. It is a curious point that in our comparative year (1924) when nearly 100,000 school meals were supplied the number of malnourished children was rather higher (sixty-three). As the personnel of the medical staff is practically unchanged, and, therefore, presumably the basis of classification is practically unchanged, the comparison is a fair one.

UNCLEANLINESS.

The number of verminous children remains very small, and is practically now reduced to a minimum figure, representing only the sprinkling of hopeless cases which inevitably occurs in any area. Allowing for the figures of the school clinics the number of children found verminous at the medical inspections, at which every child is examined as to cleanliness, works out at about 0.5 per cent. One contrasts this with the early days of medical inspection when, in some schools, the percentage of verminous children was as high as 50 per cent.

"Surprise" visits to schools for the purpose of examining children for uncleanness were paid as usual by the Health Visitors and District Nurses. The visits paid amounted to 942, rather more than three visits to each school and department. In all 56,174 children were examined, and of these 461 were found to be verminous. All these cases were subsequently kept under observation.

EYE CONDITIONS.

The figures for eye defects, including external eye disease and defective vision and squint, remain almost exactly the same as last year. The number of cases of defective vision is very high, and I think there is little doubt

that the defective lighting in many schools (and homes) must influence these figures. I came across one school during the year in which the lighting was so bad that I was unaware that I had overlooked the children in the back row of desks until the headmaster drew my attention to the matter. Another member of the medical staff told me of a similar experience during the year.

EAR, NOSE AND THROAT CONDITIONS.

The figures are considerably in excess of those for 1928, both as regards the number referred for treatment and the number treated. The completion of the new arrangements with the resulting speeding up of treatment accounts for this, especially as regards cases of deafness and ear disease. Such cases are more definitely sought for, and head teachers, appreciative of the change, bring forward more cases at the inspections.

TUBERCULOSIS.

Six new cases of definite pulmonary tuberculosis were discovered at the school medical inspections during the year. Every effort is made to find such cases, and 463 school children were examined as "contacts" of tuberculous persons. Of this number three were found to be suffering from definite pulmonary tuberculosis, and fourteen were classified as "suspicious."

DEFICIENCY DISEASES.

To amplify what has been said under "malnutrition" it is gratifying to be able to say that a general survey of the foregoing table of defects reveals very moderate numbers of children suffering from "deficiency" diseases. Such diseases in the main are due to inadequate or badly balanced diets and lack of sunlight. In the table such defects fall under "malnutrition," already referred to, "functional heart disease and anæmia," to some extent under "lung

diseases " whether tubercular, suspicious, weak chest, chronic bronchitis, and the like, and finally under " other diseases " are included cases of " debility." It is not possible to give actual figures and percentages without much statistical labour, but the main point is clear that the numbers are small.

VI.—INFECTIOUS DISEASES.

School closures due to infectious disease numbered 150, as against eighty-two in the previous year. The closures were made up as follows:—

Influenza	...	93	Mumps	...	3
Measles	...	40	Diphtheria	...	2
Whooping Cough		7	Scarlet Fever	...	1
Chickenpox	...	4			

VII.—FOLLOWING-UP.

" Following-up " is the term employed to describe the measures taken to ensure as far as possible that defects requiring treatment do in fact receive such treatment. It falls administratively into two groups:—Eye, Ear, Nose and Throat, and crippling defects are dealt with by correspondence from the Head Office; all other defects are dealt with by personal visits from the nursing staff—the whole-time visitors, or the district nurses, as the case may be. It is right to say that both the nursing and clerical staffs do their part in this work of following-up extraordinarily well. The parent of every child concerned receives notification of the defect with as little delay as possible, and where any County Scheme applies the details are explained. When nothing is done by the parent, reminders either by letter or personal visit are employed in all cases. In fact, the only reason why the defects found and the defects treated do not correspond lies in the attitude of a certain proportion of parents, who are either careless or definitely antagonistic to treatment.

This proportion is a steadily diminishing quantity, and it is rarely now that the services of the Inspectors of the National Society for the Prevention of Cruelty to Children have to be enlisted. Nevertheless, we continue to be much indebted to the Society for help in a number of specially difficult cases.

The work done by the Nursing Staff during the year in this connection is set out below:—

<i>Conditions.</i>	<i>No. of Cases.</i>	<i>No. of Visits paid.</i>
Malnutrition	17	32
Uncleanliness	209	719
Skin Diseases	27	62
Eye Conditions..	307	441
Ear Conditions... ..	182	661
Nose and Throat	191	941
Heart and Circulation (including Anæmia)	164	375
Lungs (Non-Tubercular)	113	276
Lungs (Pretubercular)	19	50
Lungs (Tubercular)	3	5
Other Tubercular Conditions..	4	13
General Cases	96	237
	<hr/> 1332	<hr/> 3812

The total number of visits paid is approximately 1,000 more than in 1928, and for this the more intensive following-up of ear, nose and throat cases subsequent to operation is responsible. The results have more than justified the time and labour involved.

VIII.—MEDICAL TREATMENT.

The treatment undertaken during the year, exclusive of cases receiving private treatment, is set out below:—

Tonsils and Adenoids	359
Ear Disease and Hearing	221
Defective Vision	615
External Eye Defects	251
Heart Disease and Anæmia	79
Lung Diseases (Non-Tubercular)	94

TUBERCULOSIS.

Pulmonary—Definite	33
„ —Suspected	41
Non-Pulmonary	30
Nervous Diseases	25
Other Conditions (including Malnutrition, Skin Diseases and Minor Ailments) ...	2288
Uncleanliness (including cases found by Nurses at “surprise” visits)	632
	<hr/> 4668

The figures, which are not complete, compare favourably with the table of defects referred for treatment on page (17).

This table is not complete, because it is impossible to give reliable figures for private treatment, statements about which made by the parents are often evasive and misleading.

The orthopædic and dental defects treated are given in the appropriate sections of this report.

The School Clinics continue to cover a great amount of work, 3,225 new cases being seen during the year, with a total of 16,153 attendances. These figures were made up as under:—

<i>Conditions for which Child attended.</i>	<i>New Cases.</i>	<i>No. of Attendances all Cases.</i>
Malnutrition	24	147
Uncleanliness	37	297
Skin Diseases	770	4220
Ear Diseases	153	1397
Eye Diseases	280	1649
Nose and Throat	140	469
Heart and Circulation	86	351
Lungs (Non-Tubercular)	121	582

TUBERCULOSIS.

Pulmonary (Definite or Suspected)	57	396
Non-Pulmonary	23	299
Nervous Diseases	36	186
Deformities	30	92
Dental	56	87
Other Diseases	1413	5981
	<hr/> 3225	<hr/> 16153

For the same reason as given previously, there is a large increase as compared with 1928 in the attendances made by cases of ear disease requiring after-care.

In addition to these foregoing figures of treatment, and in addition to those relative to crippling and dental defects, which follow, reference should be made to institutional treatment.

Twenty cases of pulmonary tuberculosis were sent for sanatorium treatment, either at Stanington or Ecclefechan.

Four cases of chorea (St. Vitus' Dance) were admitted to the Children's Rest and School of Recovery, Liverpool.

It may be of interest to refer to the successful results of the treatment of thread worms by bismuth carbonate. Dr. Simpson, who carried out the treatment in his area, reports very good results.

The use of calcium in the treatment of various conditions, chiefly tubercular, was also extended with very good results.

Crippling Defects and Orthopædics.

The total number of cripples who had received treatment under the Cripple Scheme, other than adults, up to the end of 1929 was 1,373.

No material change occurred in the Cripple Scheme, but arrangements were made at the request of the Ethel Hedley Hospital Authorities to alter the clinic arrangements early in 1930. The new arrangements will provide for clinics to be held in alternate months only at Penrith, Maryport and Whitehaven. The Carlisle clinic will be discontinued.

The figures for the year are as follows:—

Table A.

New Cases during 1929	148
Number on Register, 1/1/29	391
Number Removed from Register (owing to Cured, Left County, Dead, or Cancelled)... ..	136
Number on After-care Register... ..	403
Attendances at After-care Clinics	776
Seen by Consulting Surgeon (not included in above)	61
Appliances Provided and Renewed	100
Plasters provided at After-care Clinics	15
Surgical Clogs and Boots supplied	46
Attendances at Intermediate Clinics	410
Number of Visits to Homes for After-care work ...	545
Number of Plasters put up in Homes	115
Cases in Hospital, 1/1/29, and Admissions during 1929:—	
Windermere	70
Oswestry	18
Silloth Convalescent Home	1
St. Fechan's, Ecclefechan	1

Discharges from Hospital:—

Windermere	...	...	...	...	...	53
Oswestry	...	...	...	...	...	12
Silloth Convalescent Home	...	...	...	...	...	1
St. Fechan's, Ecclefechan	...	...	...	...	...	1
Awaiting Admission to Hospital, 31/12/29	...	...	...	...	...	25
X-rayed during 1929	...	...	...	...	...	81
Awaiting X-ray	...	...	...	...	...	10

The work of the Cripple Scheme has gone on much as usual during 1929, with a few exceptions, the most important of these exceptions being the great improvement in the speeding up of admission to hospital, the children not having to wait so long for beds. This is due to the fact that the hospital authorities are turning out cases in plaster, or on frames, earlier than formerly, to finish their treatment at home under the supervision of the After-care Sister. This adds very considerably to the work and responsibility of this worker, as the children are so scattered over the County, but it is a great gain to the County financially.

This, of course, allows other patients to come under treatment much sooner, and also lessens the hospital expenditure. This will be realised at a glance when one considers that instead of keeping a patient in say for 6-12 months at the rate of from £2 6s. 0d. to £2 9s. 0d. per week, he or she is discharged in half the time to finish treatment at home under supervision, in plaster, on a frame, or in some appliance.

More tubercular cripple children have been put into huts and on to frames, and are so carrying on their treatments at home. This system has proved successful, and has, during the last three years, saved the County somewhere in the region of £1,200 on the hospital treatment of tubercular cripples alone.

During 1929, of the four boys sent to the Oswestry Training Centre for training three have done well in their several branches of work, one of them having passed his first examinations in a Commercial Course. The difficulty of finding work in Cumberland for able-bodied people, especially in the West, is very great, and it can, therefore, be understood how difficult it is to get work for those suffering from a crippling defect, and very few cripples can be placed. However, five girls have been found work this year by the After-care Sister.

The Post-Guide work goes well ahead, thanks to the four officers (Miss Mounsey-Heysham, Miss Buckley, Miss Chance and Miss Walker). It has been found during the last two years that the influence of this movement has been so good that we are hoping very shortly to start a Post-Scout Company. Sir Montague Burrows was written to about this, and he very kindly sent his Assistant Commissioner to talk matters over, and it is hoped that the movement will start early in 1930. In the summer of last year a post-guide camp for some of the worst cripples was held at Broadfield for a week, and we are indebted to Mrs. Selby Chance for the loan of the site and for her generous gifts and wholehearted kindness. This camp was carried out on exactly the same principles (with modifications) as the ordinary Girl Guides Camps. This, I believe, was the first of its kind to be held in the North of England, and was so successful that we hope it will be repeated in the future. All the children seemed to derive very great benefit from the outdoor life.

The present condition of the Cripple Scheme is indicated in the following tabular statement:—

Table B.

Polionmyelitis	...	...	...	...	...	70
Surgical Tuberculosis	...	...	...	...	...	58
Rickets	...	...	...	...	...	50
Congenital Defects	...	...	...	...	...	50
Birth Palsies	...	...	...	...	...	16
Injuries	...	...	...	...	...	19
Osteomyelitis	...	...	...	...	...	8
Torticollis	...	...	...	...	...	8
Spinal Curvature (other than T.B.)	...	...	...	...	...	26
Spastic Paralysis...	...	...	...	...	...	10
Flat Foot	...	...	...	...	...	19
Pseudo Coxalgia	...	...	...	...	...	12
Other Conditions...	...	...	...	...	...	26
Talipes	...	...	...	...	...	20
Other Forms of Paralysis	...	...	...	...	...	11

A greater number of adult cripples have been treated in 1929, and part of this is due to the help extended to these cripples through the Adult Cripple Fund, which has been generously supported by those interested in the cripple problem. The number of adult cripples treated to the end of 1929 was 40.

IX.—OPEN-AIR EDUCATION.

The proposed open-air school at Silloth has been referred to earlier in this report.

Except for the fact that an increasing number of classes are held in the school playgrounds during the summer months no special open-air education is at present undertaken.

X.—PHYSICAL TRAINING.

See Appendices C and D.

XI.—PROVISION OF MEALS.

No school meals were provided during the year.

XII.—CO-OPERATION OF PARENTS.

The co-operation of parents continues in the main to be satisfactory. There are, however, still a proportion who take no interest in or even actively resent the medical inspection of their children, and some seem to regard the suggestion that a child of theirs is other than physically perfect as a personal insult. Failure on the part of parents to co-operate is chiefly noticeable in certain specific groups of defects, especially defective vision, ear, nose and throat defects, and crippling.

Defects of a general nature, such as bronchitis, heart disease, debility, and the like, usually arouse the interest even of the stupid and careless parent, and every Medical Officer can recall many instances where such parents seemed to be almost gratified to be told that their children suffered from such interesting conditions.

With certain specific defects, however, such as those named above, the position is not so satisfactory. Take defective vision, for example. While now we have much less difficulty than formerly in getting parents to consent to have their children examined and glasses prescribed, there still remain a considerable number of parents who take no interest in this class of defect, even in cases where they are told that the condition is serious. All sorts of reasons and excuses are brought forward, such as, that no member of the family has ever worn glasses or required them, or that glasses

are unsightly, and so on. The very worst report of a parent's attitude in this class of defect came to our notice recently. In this case it was reported that the parent had said that "if the child is going blind he will just have to." It need not be pointed out that here the law of neglect comes in, and such a parent receives, without delay, a very clear reminder of this fact.

In both eye and ear, nose and throat, and, one may add, cases requiring X-ray, many parents cause a great deal of unnecessary trouble by their failure to keep appointments made for them to attend at the consulting rooms of Specialists, chiefly in Carlisle. They accept these appointments and are told that, if necessitous, the fare will be paid for the child and, in exceptional cases, for the parent, and the train or bus time table is made out for them. Yet many simply fail to turn up, even more than once. This means that a great deal of unnecessary trouble is caused to Miss March, the County Superintendent of Nurses, who handles this difficult and detailed work, requiring a complete knowledge of train and bus services all over the County, exceedingly well, and to her staff who often spends hours searching in Carlisle for children and parents who may, or may not, have come. It is also very unfair to the Specialists who reserve for these cases, at our request, some hours at the busiest part of the day.

In the ear, nose and throat, and cripple sections, which involve operation, and the child leaving home, possibly, in the case of cripples, for a considerable period, there is often great difficulty in obtaining the parents consent to treatment. This, of course, is understandable, and the difficulty is usually overcome when the various aspects of the case are explained.

But, to my mind, the chief test of co-operation arises when parents are asked to share in the carrying out of rather monotonous treatment over long periods, and under this test the co-operation of very many parents breaks down badly.

It is no earthly use, for example, for a parent to take a child to have an eye defect examined and glasses prescribed, and even to pay part or all of the cost of the glasses if thereafter the child does not wear the glasses, or twists the frames so that the angle is wrong, or if broken lenses are not replaced. Yet this kind of thing happens wholesale.

Neither is it any use to take a child to the cripple clinic, or the ear, nose and throat specialist, and even to consent to operative treatment if the necessary after-care is allowed to slide, in the shape of night splints or other appliances not worn regularly, or put on carelessly, or of daily massage or muscle stretching not done, or of ear drop or nasal oil or inhalations, provided free of cost, not used daily as directed.

Dr. Simpson has on several occasions drawn attention to lack of co-operation of many parents in his area in the matter of care of glasses and after-care of ear, nose and throat cases.

XIII.—CO-OPERATION OF TEACHERS.

The Medical Officers continue to be much indebted to the head teachers and their staffs for their help in the work of the medical inspection proper, and in securing the interest of the parents in the treatment of defects. Hostility now is practically unknown, indifference is rare, and practically everywhere the head teachers give us all the help they possibly can, and this help is very keenly appreciated, because the attitude of the head of the school can, as every Medical Officer knows, largely make or mar the School Medical Service in the area concerned.

XIV.—CO-OPERATION OF SCHOOL ATTENDANCE OFFICERS.

The relations between the Medical Staff and the Attendance Officers are of the best, which is as it should be, because their respective duties are interdependant.

The Attendance Officers have continued to collect parents' contributions in respect of treatment under the School Medical Service.

It is right to say here, now that this work is about to be transferred from the Attendance Officers, that these Officers have done this difficult and rather thankless work with great tact and efficiency. Since October, 1927, when the Attendance Officers took over this work, they have been asked to collect contributions affecting 931 children and amounting to £358. They have actually collected almost £340.

XV.—CO-OPERATION OF VOLUNTARY BODIES.

Reference has been made to the help given to our crippled girls by certain Officers of the Girl Guides Association. Although not strictly a "voluntary body" thanks are once more due to those ladies and gentlemen who have given us great help during the year by transporting cripples in their cars to and from the Cripple Clinics.

The two branches of the National Society for the Prevention of Cruelty to Children have once more given us great help in the specially difficult cases, about twenty in number, which we referred to them. Twenty cases may not seem a large number, but each case so referred means that a child (or children) is suffering seriously through gross neglect, and that we have come to the end of our other resources in the matter.

Finally, we have been much indebted to certain Women's Institutes in the County for the gift of 120 pairs of slippers, which have all been distributed among selected rural schools. It is impossible to mention names because some donations reached us anonymously. We could have distributed more slippers easily as the demand for these is very considerable.

XVI.—BLIND, DEAF, DEFECTIVE AND EPILEPTIC CHILDREN.

During the year thirteen deaf and dumb and ten blind children were in special institutions outside this County, and were maintained there, in whole or part, by the Education Authority.

XVII.—SECONDARY SCHOOLS.

Over one thousand secondary school children were examined during the year. Of these 702 were examined as "Routines." All children are examined as "Routines" twice during their secondary school life—on admission and on becoming 15 years of age. Of these 702 Routines about 60 per cent. had no defects. This percentage seems to have become more or less a standard figure, and considering the high standard set before a child is classed as having no defects it shows that medical inspection in the elementary schools allows little to pass through the net. The remaining

40 per cent. with defects include many defective teeth and groups of defects, e.g., heart disease, which merely come in as under observation. It is rare to find a defect in a secondary school child on admission which has not been noted on the elementary school card, and for which treatment has not been offered.

The co-operation of the head teachers in securing that treatment recommended for defects found is invaluable. The usual tables follow; these do not include the figures for Whitehaven Secondary School, which are included in Appendix E.



TABLE I.

A general statement of the numbers examined, of the defects found, and of treatment obtained :—

	<i>Referred from 1928.</i>		1929. <i>Routines and Specials.</i>
Number of children examined ...	337	...	702
Number of re-examinations ...	15	...	13
Children with no defects ...	19	...	437
Total number of defects referred for treatment ...	204	...	177
Total number of defects treated or partially treated ...	163	...	9

TABLE II.

	<i>Referred for Treatment.</i>		<i>Referred for Observation</i>		<i>Treated or Partly Treated.</i>	
	1928.	1929.	1928.	1929.	1928.	1929.
Defective Teeth ...	101	84	—	—	65	2
Malnutrition ...	5	5	2	—	5	—
Pul. Tuberculosis ...	—	—	—	—	—	—
Pre-Tubercular ...	4	—	5	—	4	—
Bronchitis—Weak Chest	12	7	27	20	11	1
Organic Heart Disease	1	—	9	10	1	—
Functional Heart Disease	1	—	20	19	1	—
Anæmia ...	2	3	2	—	1	1
Defective Vision ...	39	41	58	30	36	2
Otorrhœa ...	1	—	1	1	1	—
Defective Hearing ...	2	1	6	—	1	—
Tonsils ...	4	11	6	10	5	1
Adenoids ...	1	—	2	—	2	—
Tonsils and Adenoids	3	2	1	—	1	—
Non-Pulmonary Tuberculosis ...	—	—	1	—	—	—
Spinal and Other Deformities ...	5	4	3	5	6	1
Skin Diseases ...	2	2	—	3	2	—
Other Defects ...	21	20	16	23	17	1

Miscellaneous.

(a) Sixty-five children were excluded from school by the School Medical Officer for periods of one month or over, and eight were excluded permanently and their names removed from the registers on medical grounds.

(b) Examinations of Teachers (on appointment), Pupil Teachers, and Bursars:—

<i>New Cases.</i>					1929.
Number Examined	...	...	...	...	98
Number without Defects	...	...	...	...	80
Number with Defects:					
Defective Teeth	...	...	...	...	9
Defective Eyes	...	...	...	...	4
Other Defects	...	...	...	...	5

<i>Of the above.</i>					
Number Re-examined	...	...	...	...	1
Defects Remedied	...	...	...	...	—
Defects still Unremedied	...	...	...	...	1

<i>Cases Referred from 1928.</i>					
Number of Cases	...	...	...	...	5
Number Re-examined	...	...	...	...	5
Number found Fit on Re-examination	...	...	...	...	5
Number with Defects still Unremedied	...	...	...	...	—
Number given up Teaching	...	...	...	...	—

KENNETH FRASER, M.D., F.R.S.E., D.P.H.,
Deputy School Medical Officer.

April 24th, 1930.

APPENDIX A.

XXIV.—*STATISTICAL TABLES*

For the Year 1929.

Table I.—Number of Children inspected.

Table II.—Return of Defects found.

Table III.—Numerical Return of all exceptional
Children.

Table IV.—Treatment of Defects of Children.

TABLE I.

RETURN OF MEDICAL INSPECTIONS.

A.—ROUTINE MEDICAL INSPECTIONS.

Number of Code Group Inspections :—

<i>Entrants.</i>		<i>Intermediates.</i>		<i>Leavers.</i>		<i>Total.</i>
2697	...	2505	...	2258	..	7460

Number of other Routine Inspections :—

Nil.

B.—OTHER INSPECTIONS.

Number of Special Inspections	...	...	...	9026
Number of Re-inspections	...	...	...	5368
Total number of other Inspections	...	...	...	<u>14394</u>

TABLE II.

A. RETURN OF DEFECTS FOUND BY MEDICAL INSPECTION

In the Year Ended 31st December, 1929.

DEFECT OR DISEASE.			Routine Inspections. No. of Defects.		Special Inspections No. of Defects.	
			Requiring treatment.	Requiring to be kept under ob- servation, but not re- quiring treatment.	Requiring treatment.	Requiring to be kept under ob- servation, but not re- quiring treatment.
(1)			(2)	(3)	(4)	(5)
Malnutrition...	...	...	19	6	38	9
Uncleanliness	...	...	58	13	99	28
Ringworm :—						
Head	...	...	7	1	49	1
Body	...	...	—	—	48	1
Scabies	...	...	14	1	37	—
Impetigo	...	...	45	—	476	2
Other Diseases (Non-Tubercular)	...	...	25	14	228	19
Eye	...	Blepharitis	35	3	105	1
	...	Conjunctivitis	5	—	59	1
	...	Keratitis	—	—	4	—
	...	Corneal Ulcer	—	—	—	—
	...	Corneal Opacities	2	—	9	7
	...	Defective Vision	246	310	390	700
	...	Squint	17	10	36	39
	...	Other Conditions	41	56	90	86
Ear	...	Defective Hearing	22	11	54	13
	...	Otitis Media...	40	16	143	26
	...	Other Ear Diseases...	12	1	38	7
Nose and Throat	...	Enlarged Tonsils	109	324	153	349
	...	Adenoids	43	58	47	49
	...	Enlarged Tonsils and Adenoids	99	54	119	22
	...	Other Conditions	20	12	61	27
Enlarged Cervical Glands (Non-Tubercular)...			28	72	52	101
Defective Speech			1	30	1	28
Teeth	...	Dental Diseases	226	12	339	18
Heart and Circulation	...	Heart Disease :—				
	...	Organic	9	48	11	82
	...	Functional...	—	177	6	157
Lungs	...	Anæmia	44	5	118	13
	...	Bronchitis	64	87	95	50
	...	Other Non-Tubercular Diseases	28	326	62	393
Tubercu- losis	...	Pulmonary :—				
	...	Definite	6	5	35	6
	...	Suspected	10	3	44	11
	...	Non-Pulmonary :—				
	...	Glands	3	8	17	9
	...	Spine	—	—	2	—
	...	Hip	3	1	6	3
	...	Other Bones & Joints	2	3	2	2
Nervous System	...	Skin	—	—	3	—
	...	Other Forms	1	2	4	3
	...	Epilepsy	5	5	13	10
Deformi- ties	...	Chorea	2	4	20	4
	...	Other Conditions	33	13	50	8
	...	Rickets	4	6	11	8
Other Defects and Diseases	...	Spinal Curvature	1	—	2	—
	...	Other Forms...	23	24	56	43
Total (Code Groups)			7460	1172	4564	124
Goitre			9	15	43	43
			1437	1775	4564	2503

TABLE II.

B. NUMBER OF INDIVIDUAL CHILDREN FOUND AT ROUTINE MEDICAL INSPECTION TO REQUIRE TREATMENT (EXCLUDING UNCLEANLINESS AND DENTAL DISEASES).

Code Groups :—		Number of Children.		Percentage of Children found to require Treatment.	
		Inspected.	Found to require Treatment.		
Entrants...	...	2697	488	...	18%
Intermediates	...	2505	419	...	17%
Leavers	...	2258	265	...	12%
Total (Code Groups)	...	7460	1172	...	16%
Other Routine Inspections		—	—	...	—

COUNTY OF CUMBERLAND.

SCHOOL MEDICAL SERVICE.

TABLE III.—RETURN OF ALL EXCEPTIONAL CHILDREN IN THE AREA.

			Boys.	Girls.	Total
Blind (including partially Blind)	Suitable for training in a School or Class for the Totally Blind	Attending Certified Schools or Classes for the Blind	1	1	2
		Attending Public Elementary Schools	—	—	—
		At other Institutions	—	—	—
		At no School or Institution	—	—	—
	Suitable for training in a School or Class for the Partially Blind	Attending Certified Schools or Classes for the Blind	3	5	8
		Attending Public Elementary Schools	2	—	2
		At other Institutions	—	—	—
		At no School or Institution	—	—	—
Deaf (including Deaf and Dumb and partially Deaf)	Suitable for training in a School or Class for the Totally Deaf or Deaf and Dumb	Attending Certified Schools or Classes for the Deaf	6	7	13
		Attending Public Elementary Schools	—	1	1
		At other Institutions	—	—	—
		At no School or Institution	—	1	1
	Suitable for training in a School or Class for the Partially Deaf	Attending Certified Schools or Classes for the Deaf	—	—	—
		Attending Public Elementary Schools	7	9	16
		At other Institutions	—	—	—
		At no School or Institution	1	—	1
Mentally Defective	Feeble-minded (Cases not notifiable to the Local Control Authority)	Attending Certified Schools for Mentally Defective Children	—	—	—
		Attending Public Elementary Schools	18	16	34
		At other Institutions	—	—	—
		At no School or Institution	4	3	7
	Notified to the Local Control Authority during the year.	Feeble-minded	—	—	—
		Imbeciles	8	1	9
		Idiots	—	—	—
			—	—	—
Epileptics	Suffering from severe Epilepsy	Attending Certified Schools (Special) for Epileptics	—	—	—
		In Institutions other than Certified Special Schools	—	—	—
		Attending Public Elementary Schools	12	9	21
		At no School or Institution	3	4	7
	Suffering from Epilepsy which is not severe	Attending Public Elementary Schools	3	2	5
		At no School or Institution	—	—	—
	Infectious and Pulmonary and Glandular Tuberculosis	At Sanatoria or Sanatorium Schools approved by the Ministry of Health or the Board	—	4	4
		At other Institutions	—	—	—
		At no School or Institution	—	—	—
Physically Defective	Non-infectious but active Pulmonary and Glandular Tuberculosis	At Sanatoria or Sanatorium Schools approved by the Ministry of Health or the Board	9	10	19
		At Certified Residential Open Air Schools	—	—	—
		At Certified Day Open Air Schools	—	—	—
		At Public Elementary Schools	22	31	53
		At other Institutions	—	—	—
		At no School or Institution	6	6	12
			—	—	—
	Delicate Children (e.g., pre or latent Tuberculosis, Malnutrition, Debility, Anæmia, etc.)	At Certified Residential Open Air Schools	—	—	—
		At Certified Day Open Air Schools	—	—	—
		At Public Elementary Schools	739	572	1311
		At other Institutions	—	5	5
		At no School or Institution	11	7	18
	Active Non-Pulmonary Tuberculosis	At Sanatoria or Hospital Schools approved by the Ministry of Health or the Board	7	3	10
		At Public Elementary Schools	14	10	24
		At other Institutions	—	—	—
		At no School or Institution	1	—	1
	Crippled Children (other than those with active Tuberculosis, e.g., Children suffering from Paralysis, &c., and including those with severe Heart Disease)	At Certified Hospital Schools	—	1	1
		At Certified Residential Cripple Schools	—	—	—
		At Certified Day Cripple Schools	—	—	—
		At Public Elementary Schools	159	162	321
		At other Institutions	13	7	20
		At no School or Institution	59	55	114

RETURN OF DEFECTS TREATED DURING THE YEAR ENDED
31st DECEMBER, 1929.

TREATMENT TABLE IV.

GROUP I.—MINOR AILMENTS (EXCLUDING UNCLEANLINESS, FOR WHICH
SEE GROUP 5).

<i>Disease or Defect</i>	<i>Number of Defects Treated, or under treatment during the year.</i>		
	<i>Under the Authority's Scheme.</i>	<i>Otherwise.</i>	<i>Total.</i>
(1)	(2)	(3)	(4)
<i>Skin.</i>			
Ringworm—Scalp	44	3	47
Ringworm—Body	46	—	46
Scabies	51	1	52
Impetigo	437	4	441
Other Skin Diseases	188	23	211
Minor Eye Defects	196	24	220
(External and other, but exclud- ing cases falling in Group 2).			
Minor Ear Defects	118	16	134
Miscellaneous	1163	80	1243
(e.g., Minor Injuries—bruises, sores, chilblains, etc.)			
Total	2243	151	2394

TABLE IV.

GROUP II.—DEFECTIVE VISION AND SQUINT (EXCLUDING MINOR EYE DEFECTS TREATED AS MINOR AILMENTS)—GROUP I.

Number of Defects dealt with.

<i>Defects or Disease.</i>	<i>Under the Authority's Scheme.</i>	<i>Submitted to refraction by Private Practitioner or at Hospital, apart from the Authority's Scheme.</i>	<i>Otherwise.</i>	<i>Total.</i>
(1)	(2)	(3)	(4)	(5)
Errors of Refraction (including Squint). Operations for Squint should be recorded separately in the body of the Report)	559	23	10	592
Other Defects or Disease of the Eyes (excluding those recorded in Group I)... ..	19	4	—	23
Total	578	27	10	615

Total Number of Children for whom Spectacles were prescribed :

(a) Under the Authority's Scheme	528
(b) Otherwise	23

Total Number of Children who obtained or received spectacles :

(a) Under the Authority's Scheme	498
(b) Otherwise	12

GROUP III.—TREATMENT OF DEFECTS OF NOSE AND THROAT.
Number of Defects.

Received Operative Treatment.

<i>Under the Authority's Scheme, in Clinic or Hospital.</i>	<i>By Private Practitioner or Hospital apart from the Authority's Scheme.</i>	<i>Total.</i>	<i>Received other forms of Treatment.</i>	<i>Total Number Treated.</i>
335	109	444	25	469

TABLE IV. GROUP IV.—DENTAL DEFECTS.

(1) Number of Children who were :—

(a) Inspected by the Dentist :—

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(b) Found to require treatment ... 4275

(c) Actually treated ... 2154

(d) Re-treated during the year as the
result of periodical examination 487

(2) Half days devoted to Inspection 26

Treatment 391 Total 417

(3) Attendance made by Children for treatment 2964

(4) Fillings ... Permanent Teeth 726

Temporary Teeth — Total 726

(5) Extractions Permanent Teeth 2040

Temporary Teeth 4499 Total 6539

(6) General anæsthetics administered for

extractions ... 2494

(7) Other Permanent Teeth 611

Operations Temporary Teeth — Total 611

GROUP V.—UNCLEANLINESS AND VERMINOUS
CONDITIONS.(1) Average number of visits per school made during
the year by the School Nurses ... 3(2) Total number of examinations of children in the
schools by School Nurses ... 56174

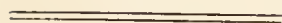
(3) Number of individual children found unclean ... 670

(4) Number of children cleansed under arrangements
made by the Local Education Authority ... —(5) Number of cases in which legal proceedings were
taken :—

(a) Under the Education Act, 1921... —

(b) Under School Attendance By-laws ... —

APPENDIX B.



REPORT
OF THE
SCHOOL DENTAL OFFICER

For the Year ended 31st December, 1929.

BY

F. E. GILLIERON, L.D.S.,
School Dental Officer.

APPENDIX B.

REPORT OF THE SCHOOL DENTAL OFFICER.

I beg to submit my report for the year ending December 31st, 1929.

Dental treatment has been undertaken under the usual routine system in the following towns: Maryport, Longtown (and district), Brampton (and district), Wigton (and district) and Penrith (and district). It is hoped that these towns will provide an area which will come under supervision once per annum in accordance with the scheme submitted to the Board of Education. It is very desirable that the children in these towns, with their surrounding rural districts, should not receive spasmodic and irregular dental attention, but should be examined and treated at least once during the course of each school year. It is also desirable that conservative work should occupy as much as possible of our time. Each visit to a town should see fewer extractions and more conservative dentistry. The area mentioned above comprises a school population of approximately 8,000. If it is found that this number is too large to permit of our getting round once per annum then it must be cut down to rather smaller dimensions in order that every child may have dental inspection yearly. Personally, I feel that this scheme is absolutely desirable, if we are ever to overcome the prejudice of many parents against fillings and conservation of the natural dentition. At present the average parent, interviewed by the School Dental Officer in the course of his duties, has very little or no opinion at all of the value of a sound and healthy set of natural teeth. How could they have? They have never themselves received the benefits arising from the progress in modern dentistry. Much has yet to be learnt regarding the etiology (or cause) of dental disease, but this we do know, that a sound and functioning pair of jaws, with healthy teeth, is a very great asset to health, and indeed its possession is an essential to the maximum efficiency in our daily lives. The vast majority of parents of what are commonly known as the upper and middle classes are fully alive to the benefits which accrue from a healthy diet and that usually concurrent feature, a healthy mouth. The ambition of the School Dental Service is unquestionably to try to inculcate this desire in those families, who in the past have not been so fortunate as to command the services of dental practitioners, who are thoroughly up to date in their craft. The ideal at which we should all aim is to confine the supply of artificial teeth to

extreme old age. Also, our services should be as much educational as remedial. Every opportunity is taken when in contact with parents to preach the doctrine of oral cleanliness. Hence, in our opinion, the scheme which takes a definite area and treats **all** children in that area annually during school life is the sound one for achieving these ideals in our County. Remaining areas can be taken in and treated as finance permits, the County adding further Dental Officers to our staff. This arrangement is very largely the one advocated by Sir George Newman in his Annual Report for 1923, in which he discusses the procedure to be adopted in under-staffed counties. The normal load for a School Dental Officer to treat efficiently once per annum has been found to be 4,000-5,000 children—the figures varying according to the amount of travelling required and the conveniences to hand in the clinics. In some respects Sir George Newman's scheme of taking in areas by age groups would scarcely be feasible in a scattered County like Cumberland. We, therefore, take an area and treat the children of **all** ages in it.

In the course of school inspections in the last nine years it has been apparent that the teeth of the new entrants are steadily on the down grade, and this fact is causing me some anxiety. This is in accordance with the observations of the older Dental Officers in many areas. It is very difficult, if not impossible, to provide exact statistics as to the degree of sepsis present in the mouths of our entrants of 1921, and say, 1930. Yet we have no hesitation in saying that the dentitions we saw in the 5 years age group of 1921 were vastly superior to those we see in the same group in 1930. My own opinion, put forward with reserve, is that the whole matter is a question of diet. Many parents have been on unemployment pay, or their wages have been very small for some six or seven years now. In the effort to balance the family exchequer, the diet has been selected for quantity and not quality. The foods containing lime and mineral salts, vitamins, etc., do not appear in large enough quantity in their daily diet. Further, the diet is not sufficiently fibrous to make the teeth self-cleansing. If only one could persuade parents to buy more wholemeal bread, I am sure this would largely help in keeping both the teeth and digestion of the children in better condition. The ordinary average mixed diet of the middle and upper classes is a sound one, and contains in sufficient quantity the materials for developing sound teeth. Sugars and starches form the bulk of the artisan diet, and are insufficient to provide good enamel and dentine and bone and **keep them free from decay.** Fruit

and raw salads on account of expense cannot take the place they should in the dietary. The allotment of the keen artisan gardener should be made to yield its maximum in salads and vegetables in order to help this important matter of diet. Many children of five are inspected whose teeth are doomed even at that early age. Their temporary teeth are hopelessly decayed and lost, causing the permanent teeth which follow to erupt into the wrong position in the jaws. This irregularity, unless corrected, predisposes the teeth to decay and the gums to pyorrhœa. The number of mouths of this type in our elementary schools in Cumberland is out of proportion altogether to the number a private dental practitioner will see in the course of his daily work throughout the year. The solution to the problem lies largely with the ante and post-natal care of the mother's diet, and the observance of the rules laid down by the medical practitioners in the course of their child welfare propaganda. Whilst many parents are desirous of carrying out these rules, unquestionably financial distress does make their observance difficult or impossible.

The Education Committee embarked this year on the carrying out of the dental scheme submitted by the School Medical and Dental Officers for the approval of the Board of Education.

Mr. Gollan, L.D.S. (Glasgow), was appointed to act as Assistant Dental Officer, with headquarters in Whitehaven. He commenced duties in December, and treated at the Whitehaven clinic the children from Parton, Distington, Harrington, Hensingham, Dyon, etc. He is about to open clinics at Egremont, Cleator Moor, and Frizington, with their surrounding country schools. His area will comprise a school population of approximately 7,000. Reports continue to come to hand of the appreciation by parents, headmasters, and others, of this officer's efforts on the children's behalf. These are quite gratuitous expressions of appreciations, and it is gratifying to know that the appointment has been a wise one. He has been greatly assisted in this work by the experienced help of the Senior Dental Nurse, Miss Postlethwaite, who knows the district and people well.

During the year larger numbers of children have had to be treated as necessitous cases, and receive their treatment free. This particularly applies to mining and industrial areas. A dental fee of 2/6 even if excellent value may be too big for a slender income to bear. Personally, I feel sure the

result of lowering the fee from 2/6 to 1/- per child would see a greater income to the Council than the present fee yields, and on these grounds I would strongly recommend that the Committee consider the matter.

The treatment figures for the year are added as an Appendix. In conclusion, may I say that the aim of our dental staff is to try and give both parents and children the courtesy and treatment they would receive from a private practitioner. The quest for enormous statistical returns when dealing with children does not appeal to us, and quality of work counts rather than quantity. Efforts directed towards quantity of work, except in very rare cases, usually have the effect of bringing dentistry into disrepute, particularly where fillings are concerned. We have already a prejudice to overcome in this respect with the parents as a result of hurried and makeshift dentistry performed on the male parent during war days. It is the endeavour of us all to try and overcome this stubborn prejudice existing in some districts against conservative treatment by fillings, etc. It is hoped that when our present patients become parents themselves they will see the benefits they obtained by submitting themselves cheerfully to our efforts, and insist on their own children doing likewise.

F. E. GILLIERON, L.D.S.,

School Dental Officer.



APPENDICES C. and D.

REPORTS
ON
PHYSICAL TRAINING

For the Year ended 31st December, 1929.

APPENDIX C.

REPORT ON PHYSICAL TRAINING FOR THE YEAR ENDING DECEMBER 31st, 1929, BY MISS MARGARET FRASER, CHIEF (WOMAN) ORGANISER.

Physical Education in Cumberland develops on sound lines. The Teachers combine loyally with the Organisers in the endeavour to train up a public-spirited, sound bodied race.

STAFF.

I am pleased to be able to report again that no changes have occurred in the personnel of the staff during the year.

TEACHERS' CLASSES.

<i>Centre.</i>	<i>Subject.</i>	<i>No. on Roll.</i>	<i>Teacher.</i>
Aspatria ...	Physical Training ...	31	Miss M. Fraser.
Maryport ...	Physical Training ...	22	Miss M. Ostle.
Lazonby ...	Physical Training ...	13	Miss N. Hall.
Cleator ...	Organised Games ...	31	Miss M. Ostle.
Egremont ...	Organised Games ...	31	Miss M. Ostle.
Cockermouth	Organised Games ...	20	Miss N. Hall.

The attendance at these classes was very good on the whole in spite of many stormy, wet nights. The Organised Games' Classes were held in the summer. Most of the work was taken out of doors, and was based on the Games' Syllabus issued by the Organisers in 1928.

PLAYING FIELDS.

The help given by the Committee in regard to the provision of playing fields is much appreciated, and the number of schools with the use of a field for Organised Games is steadily increasing, but there are still many which are unfortunate in this respect.

Penrith children derive benefit and pleasure from the use of Kilgour Field, which the Committee arranged to rent as a playing field for all the Urban Schools.

A demonstration game of Rounders and Stool Ball was held on this field on July 8th, after school hours, and was well attended by the Penrith teachers, who showed both interest and enthusiasm.

EQUIPMENT.

The games apparatus supplied by the Committee to the schools renders yeomen service, but unfortunately the amount is very limited on account of the expense. In the majority of cases, however, the head teachers manage to supplement this allowance—bean bags are made in the schools, and in one rural school, “Bromfield,” the children learn to make their own ropes for jumping, skipping, etc.

ORGANISED GAMES.

Rounders and Stool Ball have been much more widely played this year, and are gaining in popularity, but Net-ball still remains the chief favourite, and has reached a good standard.

NET-BALL DEMONSTRATION MATCH.

In order to stimulate a wider interest in Net-ball among older girls, two of the champion teams in the North of England, Manchester University and Durham University, consented to come and play a demonstration match in Carlisle on May 4th. This game was witnessed by nearly 1,500 spectators, the majority of whom were school children from all parts of Cumberland, including Millom. After all the expenses of the match had been paid there was a balance of just over £10, which was divided, with the £5 kindly sent by Lord Lonsdale, between the fares of the children from the west of the County. An All-England Women's Net-ball Association is now well established, and it is hoped that clubs will be formed for older girls, leading to the formation of a Cumberland Ladies' Net-ball Team.

NET-BALL LEAGUE RESULTS.

<i>District.</i>	<i>Winning School.</i>
Carlisle Rural District ...	Ivegill.
Penrith Rural District ...	Renwick.
Whitehaven Rural District..	Parton Girls.
Maryport	Maryport Council.
Aspatria	Westnewton.
Cockermouth	Dovenby.
Keswick	St. John's Girls.

The success of these matches is largely due to all the help and support of the teachers, which has been most ungrudgingly given.

SPORTS.

This year there have been more "Sports" held in the schools than ever before, and it is impossible to mention them all, but praise is due to the Head and Assistant Teachers, who were responsible for their organisation.

Aspatia School Sports, which had to be postponed on account of the weather to July 16th were, as usual, very well organised, and carried out in Brayton Park. An innovation this year was the massed dancing on the lawn, which was very effective, and reflected great credit on all concerned.

Boltons C.E. School Sports were held on June 21st, and a delightful spirit was shown by all the competitors, including the Infants, who had special events arranged for them.

Grasslot School is to be congratulated on the success of its first Sports' Day, held on July 17th, when a most enjoyable display of physical training, games and dances was given by the pupils.

Bassenthwaite School Sports, on July 15th, were successfully carried out, and interesting displays of physical training were included in the programme, also a mental test race, which proved very amusing, and demonstrated the alertness of the competitors.

Burgh and District School Sports, on July 12th, were most enjoyable on account of the delightful sporting spirit shown by all the competitors from the different schools. The competition was so keen, that until the last race only two points divided the leading schools. Burgh School, however, finally gained the highest number of points, and so hold the Osborn Shield for the second time.

Combined sports were again held at Keswick and Cockermouth, but in each case they had to be postponed to a later date on account of the weather.

SWIMMING.

The popularity of Swimming is deservedly increasing, but unfortunately there are few centres in Cumberland where instruction can be given.

Encouraging results were obtained in Wigton, where the schools are fortunate in having access to good Baths. The children at Esdale High School learn to swim in the River Esk, near the school, and at Abbey Town the possibilities of a Swimming Pool are being explored.

EVENING CONTINUATION CLASSES.

I am pleased to report that the number of Physical Training Classes, arranged under the Further Education Committee, is increasing.

Successful Physical Training and Folk Dancing Classes are being held at the following centres:—

<i>Centre.</i>	<i>Subject.</i>	<i>Teacher.</i>
Penrith (two classes)	Physical Training	... Miss Donaldson.
Dearham ...	Physical Training	... Miss Dobson.
Cockermouth	Physical Training	... Miss Dobson.
Frizington ...	Physical Training	... Miss Ostle.
Parton ..	Physical Training	... Miss Ostle.
Distington ...	Physical Training	...
Alston ...	Physical Training	... Miss Wisnom.
Whitehaven ..	Physical Training	... Miss Heawood.
Portinscale ...	Folk Dancing ...	... Miss Hall.
Flimby ...	Physical Training	... Miss Warburton
Abbey Town ..	Folk Dancing ...	... Miss Fisher.
Watermillock	Folk Dancing ...	... Miss Bell.
Hunsonby ...	Folk Dancing ...	... Miss Hall.
Eskdale ...	Folk Dancing ...	... Miss Armstrong.

The students attend well and appear keenly interested, and it is hoped that next year it may be possible to arrange inter-district competitions.

On Thursday, February 21st, a demonstration of Evening School work was held at the Cockermouth Drill Hall, which was witnessed by a large number of spectators.

FOLK DANCING.

During Easter week the English Folk Dance Society held a Vacation School of Folk Dancing in Keswick, where a number of Cumberland teachers attended, and gained certificates.

The standard of Folk Dancing throughout the County is rapidly improving, owing to the large number of teachers who attend the classes held under the auspices of the Cumberland Branch of the English Folk Dance Society.

SECONDARY SCHOOLS.

A very good standard of work was shown by the pupils who took part in the inter-form gymnastic competitions, held during the summer term at Keswick, and the Thomlinson Girls' School, Wigton.

Miss Wisnom reports that the numbers have increased in both the Alston and Thomlinson Girls' School, and that a stimulus has been given to the work by the fresh apparatus, which has been added to the gymnasium.

Miss Hall reports that two of the Keswick schoolgirls were successful in the County Hockey Trials, Mary Scott being selected for the 1st Team, and F. Campbell for the 2nd Team.

In the Swimming Examination, held at the end of July, two pupils gained their Elementary Certificates, and seven out of eight candidates gained their Bronze Medals. All the Swimming at Keswick is done in the Lake, therefore, the Swimming Season is a short one.

Cockermouth Secondary School was opened in the Autumn, and the Physical Training is being taken by Miss Wisnom, who visits the school one half day per week.

MARGARET FRASER,

Chief (Woman) Organiser.

APPENDIX D.**REPORT ON PHYSICAL TRAINING FOR THE YEAR
ENDING 31st DECEMBER, 1929.**

By Mr. W. S. GRAY, Chief (Man) Organiser.

Generally speaking the Physical Training in the County is steadily improving. The great "need," however, is some sort of in-door accommodation.

During the good Spring and Summer of this year, and up to the middle of October, the work was going on splendidly in the playgrounds, but when the cold, wet month of November arrived, the out-door work got a tremendous set-back. The tables of in-door lessons sent out to the teachers, and regular demonstrations of these tables by your organisers should, however, help to counteract the detrimental effect of our very wet winter months.

It is hoped that when the re-organisation takes place (Senior and Junior Schools), either suitable and protected sheds, or, better still, in-door accommodation will be provided.

The interest in Physical Education in connection with Evening Classes is very keen indeed: here again lack of in-door accommodation is the greatest handicap.

STAFF.

I am very pleased to report that the staff remains the same. The addition of another man would certainly be a great asset to the big Secondary Schools in the West of Cumberland.

PLAYING FIELDS.

The number of Playing Fields is always on the increase. The Penrith Schools were specially fortunate in securing, on 1st April, a splendid field with ample accommodation and apparatus. Harrington, with a school population of 700, is one of the very few places which has failed to do anything in this matter.

DEMONSTRATIONS.

<i>School.</i>					<i>Date.</i>
Cleator Council ... ..	...	...	...	...	5th June, 1929.
Allhallows C. of E. ... ..	...	...	...	...	12th July, 1929.
Bassenthwaite ... ..	...	...	...	...	15th July, 1929.
Grasslot Council ... ..	...	...	...	...	17th July, 1929.
Thornhill Council... ..	...	...	...	...	17th July, 1929.
Brampton Boys' Council ... ..	...	...	...	...	10th Dec., 1929.

These displays demonstrate to the parents that in real Physical Education there is no thought of anything approaching military drill; in fact, the up-to-date schoolmaster does not mention the word drill on his time table, but wisely inserts Physical Training or Physical Education.

CRICKET.

Millom and Keswick are the only districts where a competition is organised, but in many of the other districts friendly matches are arranged; the principal difficulty is the securing of a suitable "pitch." Threlkeld C. of E. School won the Cricket Shield for the Keswick District.

STOOL BALL.

At least twenty of the County Schools are including Stool Ball in their games' programme. It is an excellent game for twenty-two players, and it does not require so much skill as its sister game of cricket. It is quite easy to improvise bats and wickets, and an old tennis ball is quite adequate.

SWIMMING.

At Wigton the following number of children attended the baths:—

<i>School.</i>			<i>Boys.</i>			<i>Girls.</i>
Wigton Roman Catholic ... ..	...	...	26	...	...	20
Wigton National ... ..	...	...	51	...	...	54

Two hundred boys from ten of our schools in the Whitelaven area attended the baths for one half-hour's instruction in swimming every Friday morning from 17th May to 25th September. Only by paying a visit to the baths, when the boys are there, can one realise the absolute joy of these lads. Of all the privileges to children provided by the Cumberland Education Authority this one is appre-

ciated most of all. It is difficult to calculate the amount of benefit derived by these boys, but it will eventually mean that every lad before he leaves school will have had an opportunity of learning to swim. The practical hygiene is also valuable, as the boys are reminded by the teachers that Friday is Swimming Day, and that they should have a "tub" on Thursday night. It is remarkable how few boys forget to do this.

CUMBERLAND SCHOOLS FOOTBALL ASSOCIATION.

<i>Competitions.</i>			<i>Finalists.</i>
County Shield	...	...	St. Patrick's, Cleator Moor (winners). Egremont Bookwell Boys.
Egremont and Cleator Moor Shield	...	...	St. Patrick's, Cleator Moor (winners). Egremont Bookwell Boys.
Cleator Moor and District League	...	...	St. Patrick's, Cleator Moor (winners).
Egremont and District League	...	...	Egremont Bookwell Boys (winners).
Millom Challenge Cup	...	...	Lapstone Road Boys (winners).
Spedding Cup	...	...	Brigham Boys', Keswick (winners).

Mr. Callighan, C.C., presented the County Shield to the winners, and Medals to the runners up. He complimented the boys on their splendid exhibition of clean football. Mr. T. Ellison, of Frizington, made the presentation at Cleator Moor of the handsome trophy for the Egremont and Cleator Moor Districts.

CUMBERLAND AND WESTMORLAND WRESTLING.

The Fourth Annual Schoolboys' Wrestling Competition took place at Braystones, on Saturday, 25th May. The entry was much smaller this year, although the wrestling was better than in previous years, the boys "getting to grips" without the usual unnecessary manoeuvring. Montreal, for the second time, won the Shield and Cups with a very fine, all round team; Cleator Council being a good second. Sir John Ponsonby presented the trophies. In the hope of creating a new and fresh interest in wrestling, the parent body—Cumberland Wrestling Association—is arranging a competition for schoolboys next summer.

SPORTS.

The following schools organised Sports' Days:—

<i>School or Schools.</i>	<i>Date.</i>	<i>No. of Competitors.</i>
	1929.	
Cleator Council	June 5 ...	150
Little Clifton	July 1 ...	210
Hallbankgate and District ...	July 6 ...	150
Caldbeck and District ...	July 5 ...	90
Cockermouth and District ...	July 8 ...	700
Keswick and District ...	July 12 ...	600
Allhallows	July 12 ...	140
Distington	July 12 ...	200
Burgh and District	July 12 ...	350
Bassenthwaite	July 15 ...	70
Longtown	July 15 ...	250
Abbeytown and Aldoth ...	July 15 ...	90
Aspatria	July 16 ...	350
Grasslot	July 17 ...	300
Boltons	June 21 ...	85
Beckermeth	July 17 ...	100
Penrith Boys' Council ...	July 18 ...	250
Blackford	July 19 ...	80
Harrington Schools	July 19 ...	400
Raughton Head	July 21 ...	70
Dearham	Aug. 30 ...	300
Thursby	Sept. 4 ...	70
Brampton Boys' Council ...	Sept. 5 ...	110
Warwicksland	Sept. 11 ...	60

Cleator, Boltons, Grasslot, Allhallows, Abbeytown, Aldoth, Warwicksland and Penrith Boys' Council Schools made their first attempt.

The heavy rain from 4th to 11th July held up these very popular meetings at Cockermouth, Aspatria and Keswick, but after some delay they were held in the evenings, and were very successful.

The most pleasing feature of these Sports' Meetings is the wonderful "sporting spirit" of the children, who accept the decisions of the judges without a grudge or grumble.

Through the Committee's kindness, I again assisted with the Workington and Whitehaven Elementary Schools Sports.

SECONDARY SCHOOLS.

A gymnasium is very much needed at both Whitehaven and Brampton Secondary Schools. A hut similar to the one at Millom would do quite well for Brampton.

COMPETITION.

On the 22nd of March, Wigton Nelson Boys had their Annual Gymnastic Competition. It took the form of a competition between teams representing each "House," the teams with leaders being selected by the boys themselves. After a keen and interesting contest, the following was the result:—1st, Red House; 2nd, White House; 3rd, Blue House; 4th, Green House.

Your Organiser was again honoured by being asked to act as Judge at the Annual Competition, held at Barrow Boys' Secondary School.

EVENING CONTINUATION CLASSES.

<i>Centre.</i>	<i>On Roll.</i>				<i>Teacher.</i>
Aspatria	15	...	Mr. Hewitson.
Dearham	35	...	Mr. Hodgson.
Egremont	21	...	Mr. Hayes.
Moor Row	23	...	Mr. Hayes.
Flinby	13	...	Mr. Warburton.
Cockermouth	17	...	Mr. Warburton.
Harrington	23	...	Mr. Harper.
Parton	18	...	Mr. Harper.
Keswick	28	...	Mr. Tringham.
Threlkeld	25	...	Mr. Tringham.
Maryport	28	...	Mr. E. D. Smith.
Penrith	17	...	Mr. Hargreaves.
Longtown	11	...	Mr. Wilkinson.
Alston	27	...	Mr. Partner.
Whitehaven	13	...	Mr. Iceton.
Millom	27	...	Mr. Iceton.

New classes have been formed at Alston, Threlkeld and Millom. At Aspatria, Dearham, Moor Row, Harrington, Longtown, Maryport and Parton much improved accommodation is required; in fact, it's wonderful to see these young lads so anxious to make the best of it, although the equipment is practically nil and the accommodation poor.

DEMONSTRATION OF PHYSICAL TRAINING, GAMES, DANCING
AND IN-DOOR SPORTS BY STUDENTS FROM TEN EVENING
CLASSES, IN COCKERMOUTH DRILL HALL, ON
THURSDAY, 21st FEBRUARY.

The above students were assisted by thirty-two boys and thirty-three girls from the Local Elementary Schools.

This is the first demonstration of its kind that has been held in the County, and the excellent results were very encouraging to the promoters.

The girls from Cockermouth and Dearham Evening Classes opened the proceedings with a neat display; then followed the boys of the Elementary Schools. Their antics and keen competition in the team events amused the audience.

The Elementary Schools girls gave a dainty exhibition of Folk Dancing, which was followed by the High Jump Competition.

J. Moyle, of Egremont, with a jump of five feet, was first, and Gordon Southam, of Bigrigg, Grasmere Champion, gave an exhibition jump. Twenty-four young men from Aspatria provided a most energetic and dashing display of good Evening Class Physical Education, and the next item—Boxing—by two trained men and two novices, gave much entertainment to the spectators.

The under 17 Wrestling Competition was won by Mossop, of Broughton Moor; while Ashbourne, of Moor Row, after a stiff tussle with Harper, of Harrington, won the over 17 competition. The girls from the Elementary Schools then treated the gathering to a Scotch Dance.

The Tug of War, for which eight teams entered, gave promise of some excellent pulling, but the polished condition of the floor ruined what would have been a most interesting item; the Harrington team taking first place.

G. B. Brown, Esq., M.A., Director of Education, was in the Chair, and Mr. Simon, of Fairfield Boys' School, acted as Honorary Secretary and Treasurer, handing over a nice little sum to Cokermonth Cottage Hospital from the proceeds.

About 700 people were present, including many teachers and people interested in Further Education.

'TEACHERS' CLASSES FOR MEN TEACHERS.

The following classes were held during the year:—

<i>Centre.</i>	<i>On Roll.</i>				<i>Teacher.</i>
Workington	25	...	Mr. W. S. Gray.
Millom	21	...	Mr. J. J. Iceton.

The Workington class was well attended, and the ability and enthusiasm of the students was much above the average. At Millom the young teachers were very keen, but the bad weather prevented those Headmasters who live at a distance from attending regularly. As usual, every facility was given by the Headmasters of the Secondary Schools to make the classes a success.

W. S. GRAY,

Chief (Man) Organiser.



APPENDIX E.

WHITEHAVEN COUNTY SECONDARY SCHOOL.

REPORT FOR 1929.

[To the Governors of the Whitehaven County Secondary School].

LADIES AND GENTLEMEN,

I have, during 1929, made 359 routine examinations of the pupils of this school, and thirty-four special re-examinations, besides attending the several casualties, which have happened from time to time during the three terms. Of these 359, 109 have been first examinations of the new pupils of the school. This first examination is, in my opinion, most important, and I have tried to make it as thorough as possible. It makes it so much more easy to judge of the physical progress of the pupils during their stay at the school, and gives one a much better opportunity of noting and comparing their development and general health from time to time.

First Examinations.—Of the 109 first examinations, sixty-three were boys and forty-six girls. Last year there were 106 first examinations—almost an identical number. The number of normal pupils show a distinct improvement on last year, there being fifty out of the 109, as against thirty-seven of the 106 last year. The girls show a distinct superiority, being equal in number with the boys, the comparisons being girls twenty-five out of forty-six and boys twenty-five out of sixty-three.

Teeth.—As usual teeth numerically head the list of defects, there being fifty-nine pupils marked under this heading—twenty-nine being boys and thirty girls. Coming, as many do, from junior district schools, it is interesting to note that no less than twenty-four have had some attention before they entered this school. Eleven of these do certainly need more attention, but it is a distinct advance on the past to know that so many have had previous attention. At the same time it is rather alarming to note that no fewer than forty-six have decayed teeth in more or less degree, who have never, so far, apparently, received any treatment. This early decay of teeth would seem to be still more alarming when one notes that two of the new pupils actually wear “dentures.”

Tonsils.—Thirty-one pupils have enlarged or unhealthy tonsils, twenty being boys and eleven girls. Besides these, four (two boys and two girls) have already had their tonsils enucleated.

I have attempted to classify these enlarged tonsils into those who need attention and those who do not. This classification, however, cannot be taken as definite inasmuch as so much depends on the accurate previous history of each case. To a great extent the question of removal is dependent on the opinion of the parents and the family doctor to whom they are referred. My findings are that in the case of ten boys and eight girls the enlarged tonsils seem to give no trouble, but that ten boys and three girls having enlarged or unhealthy tonsils are also subject to colds, or to sore throats—these latter probably need attention.

General Physical Development.—Nineteen boys and eight girls have been marked under this heading, as against thirty-two in all last year. At the age of entry one cannot be surprised at this number as systematic physical exercises have not been carried out before their entry into this school—at least I presume so in most cases. Of the nineteen boys no fewer than eleven have this defect associated with enlarged tonsils or weak chests. Amongst the eight girls, five have in addition either eye defects (two), enlarged tonsils (two), or weak chest (one). These complications are probably the primary causes of the poor development.

Eyes.—Only sixteen pupils (six boys and ten girls), as against twenty-one in 1928, have been noted as having defective vision. Of these nine (four boys and five girls) already wear spectacles, and seem to be satisfactorily “corrected.” Two boys and two girls need testing, apparently, for the first time, and three girls who wear glasses seem to have their sight inadequately corrected, and seem to need re-examination. One boy has a definite squint—he does not wear “glasses,” and should be examined. Two girls also have “squints”; one wears glasses and the other evidently needs them, and is already almost blind in the squinting eye as a consequence of not wearing glasses.

Lungs.—Seven pupils have been marked as necessary cases for re-examination and observation of their lungs. None of them show any acute condition, but not being *quite* normal they must be examined from time to time, and their work, exercise, etc., modified if, and when, necessary.

Heart.—Only one out of the four cases under this heading has been marked as suffering from organic disease, and even this one case is of somewhat doubtful origin and character. None of the cases seem to give rise to any trouble, but they will all be kept under observation as much as is possible.

Skin.—No contagious or infectious skin case was noticed, the only two cases being “moles” and “warts” in one boy and “warts” in the other.

Goitre.—One boy has been noted as having a goitre, but this was very slight, and almost, if not quite, a negligible condition.

Miscellaneous defects.—The following are notified under this heading:—

Anaemia.—Two boys and three girls.

Deafness.—Two boys.

Nasal Catarrh.—Two boys.

Defective Speech.—Two boys.

Appendix operation has been performed on one boy and one girl, and two other boys have had major operations recently performed on them.

One boy suffers from enlarged glands of the neck, and two boys and one girl are abnormally adipose. One boy suffers from imperfectly descended testicle for which he needs regular and systematic examinations, or to be kept under observation.

ROUTINE RE-EXAMINATIONS.

250 pupils have been systematically re-examined during 1929. 118 were girls and 132 boys. Practically 50% of these have been passed as normal, namely 124, composed of sixty-two boys and sixty-two girls. This is slightly better than last year when there were 125 normal pupils out of 274 examined. As with the new pupils, so with those being re-examined, the largest number of defects are those coming under the heading of teeth. A comparison of these figures

shows that they are much fewer than last year when 161 were noted. The 129 are made up by sixty-five boys and sixty-four girls. This diminution in number, I hope and believe, is due to a great extent to last year's report. I find that twenty boys and six girls have been noted as having good teeth, and sixty (thirty boys and thirty girls) as having had more or less complete attention, one of these wearing a denture. Another thirty-eight (twenty-two boys and sixteen girls) have also had attention to their teeth, but need further attention.

This figure (123) would seem to be very satisfactory, meaning, as it does, that so many parents have responded to the effort made to improve the health of the pupils—in so far as the teeth are concerned. As against this, however, I find seventy-eight pupils (forty-three boys and thirty-five girls) who have apparently not seen a dentist, and now need treatment. A great number of these cases have been notified of the necessity on more than one occasion. There may be many reasons, unavoidable as well as avoidable, on the part of the parents for neglect of this attention to what is undoubtedly a duty.

At the same time I feel that defective teeth is so greatly a forerunner and predisposing cause of bad health that I ought to draw special attention to this matter.

Tonsils.—Fifty-seven boys and twenty girls, seventy-seven in all, come under this heading as having enlarged or unhealthy tonsils. In addition five boys and two girls have had their tonsils removed.

Of the seventy-seven enlarged, or unhealthy, tonsil cases, thirty-nine boys and thirteen girls seem not to be troubled by the size of the tonsil, or frequent colds or sore throats. The remaining twenty-four (eighteen boys and six girls) do seem to be in a condition needing attention. For this reason their parents have been notified, and advised to consult their own doctor, and "a specialist," if necessary.

Eyes.—I find there are at least thirty-six pupils (twenty-one boys and fifteen girls) who wear, or ought to wear, spectacles. It is quite impossible to call this a complete list as the "power of accommodation" in children makes the only test available, in an ordinary examination, decidedly unreliable. I have found definite proof of this on several

occasions in my re-examinations. Only quite recently I have had occasion to make special re-examinations of two cases because of "headaches," and have found the sight defective in each case and probably the cause of the headaches. At the previous examination of these cases vision was recorded as quite normal, or rather that their visual acuity was $\frac{6}{8}$ which is considered normal.

Of the thirty-six pupils with defective eyesight, eight boys and ten girls seem to be quite satisfactorily, or as satisfactorily as possible, with spectacles. Ten of the remaining cases wear spectacles, which seem to be unsatisfactory and, therefore, ought to be re-tested. In addition there are two cases of squint to note. One of these cases wears glasses, but would benefit, I feel sure, in every way by an operation to put the squint straight. This is so essential for a boy's future that I feel very much that he should consult a specialist about it and undergo the operation if advised. I found two boys who seem persistently to leave their spectacles at home, who have very definite defective vision without spectacles. These boys are very decidedly running great danger of their eyes getting progressively worse. This neglect is a danger to be very much guarded against in all cases of error of refraction, as without correction, especially in the young, the condition tends to get worse rather than better.

In addition to the cases of defective vision needing spectacles I found only three cases of external inflammation of the eyes (conjunctivitis and blepharitis).

General Physical Development.—There are thirty-three cases notified under this heading (twenty boys and thirteen girls), as against twenty-six (eleven boys and fifteen girls) in the preceding year. The difference in the actual numbers is insignificant, but the reversal of the sexes is rather peculiar though probably more a matter of coincidence than of importance. As noticed in the first examinations a very large percentage of these cases are complicated by other abnormalities. As one would expect these complications are mostly enlarged tonsils or defective vision. In the first place the enlarged tonsils act by obstructing the breathing, and the defective eyes by causing the child to stoop too much at the desk. Each of these causes hampers good development. No fewer than eighteen out of the thirty-three cases have one or other of these complications.

No fewer than twenty-four cases have been noted under the heading *Heart*. Fortunately, ten at least, and probably fifteen, are only "functional" and will in time recover. Three boys, however, and six girls would appear to have definite organic heart disease. I am glad to report that all these organic cases are not of serious importance at the present time, and I hope with care which, now they know their condition, can be taken, they will all be able to grow up to be useful citizens.

I have one present pupil in mind, as I write, who developed this trouble most insidiously sometime after entry into the school. The condition would not have been discovered but for routine examination at school, but as a result of this discovery she has been able to take the necessary care, and is now progressing most satisfactorily. She will soon be leaving school, and there is reason to believe she will train thoroughly so as to earn a good living.

There are other instances from the school one could quote to show the value of school examinations if it were needed.

I am glad to say that defects under the *Respiratory System* (other than tonsils, etc.), are very few. Only three cases of lung troubles are noted and none of them show active disease of any kind. These cases, as usual, receive more than one examination each year, and I am glad to say all seem to have improved and no definite cases of tuberculosis have been found.

Goitres.—Cases of goitre have been very much fewer during the last few years. This year two boys and five girls have been marked down as having enlarged thyroids. None of them are very large, and probably all but about two will disappear completely in the course of time, with, or even without, treatment.

Skin.—No contagious or infectious case of skin disease has been found. Eight skin cases have been noted, but none of them affect the health of the school or the individual.

Miscellaneous.—I do not think any special comments need be made concerning these cases. It will suffice if I just tabulate them and make a comment, if necessary, under each head.

1. *Nasal troubles*.—Namely, catarrh, obstruction, or nose bleeding, five boys and one girl.

2. *Anaemias*.—Four boys and ten girls. This is probably a minimum.

3. *History of Rheumatic Fever*.—Two boys and three girls.

4. *Deafness*.—Two girls.

5. *Stammerers*.—One boy and one girl.

6. One girl is said to be a “bleeder,” but I am inclined to think this is an error, or perhaps rather an exaggeration. Nevertheless, it evidently ought to be noted by those in authority, as it might be dangerous to ignore the condition.

SPECIAL RE-EXAMINATION.

I have made at least thirty-four special re-examinations, twenty boys and fourteen girls. Most of these examinations have been at the request of and in conjunction with the teachers of physical training. There have been four girls and seven boys examined as to their fitness for taking systematic physical training or games on account of their hearts. Another eight boys and one girl were examined because for other reasons they had previously been disqualified from taking drill, etc.

Three girls and five boys were re-examined to see if they had still neglected to have their eyes tested.

Two other cases were re-examined by special request on account of “headaches.” These are the cases previously referred to. The rest of the re-examinations include further examinations of the chest and heart cases previously recorded, and various miscellaneous cases, such as newly discovered deafness, and various nervous cases of probably passing moment.

(Signed)

G. BERTRAM MURIEL, B.A., M.B., B.Ch. Cantab.,
M.R.C.S. Eng., L.R.C.P. Lond.

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